

History of the Case

Name: Layla Savard

Age: 5 yo

Breed: Italian Mastiff

Sex: Female

Altered: Yes

Dog's lifestyle/occupation: Household pet & family dog

Brief history of dog's family history: They received the dog from a friend

Brief history of problem in which dog is referred for:

About 2 years ago, Layla started having difficulty getting up after increased activity and then about 6 months ago she started limping. It was finally determined that she had Bi CCL tears and Bi hip OA about a month ago. She had surgery on the R CCL on 7/27/17 and the L CCL on 9/21/17.

Interventions:

▪ **Medication:**

1. Ostifen
2. Gabapentin
3. Tramadol
4. Fish Oil
5. Trazadone for DVM visits

▪ **Restrictions:**

Confinement in a crate, except to eliminate for 2 weeks. The dog must be on a leash and a sling must be used to help support the hind end.

▪ **Exercise:**

Start PROM flexion and extension

▪ **Incision:**

Monitor for signs and symptoms of infection. Do not allow licking of the incision. Removal of stitches 10-14 days after surgery.

Referring veterinarian's diagnosis: Bi CCL ruptures, Bi hip OA

Test Results:

▪ **Radiographs**

Surgery: R lateral suture 7/27/17 & L lateral suture 9/21/17

Past medical history: No significant PMH

Evaluation 1

August 9, 2017

Observation:

Incision intact and raised with no sx of infection, swelling around stifle

Palpation

No tenderness over R stifle

Posture

- **Standing:** Low T-spine and high L-spine increased kyphosis
- **Sitting:** RH underneath w. LH in slight ABD

Functional Mobility

- **Stand > Sit:** Decreased eccentric control, decreased WB RH, increased Bi FL use
- **Sit > Stand:** Decreased push off RH, increased Bi FL use

Gait Assessment:

- **Walk:** 2/4 RH, R hip ABD, RH PWB, limited stifle ext- maintains stifle flex throughout gait
- **Trot:** NA

PROM (deg)		R*	L
Limbs: Hip	Flex	40	40
	Ext	110	120
Stifle	Flex	60	55
	Ext	110	120

- Guarded when attempted ROM

Flexibility

Bi HS tightness

Circumference (cm)		R*	L
Hind End	Hip	42	50
	Stifle	23	29

Neurological Testing

NA

Pain

3/10 (Matthews, K.A., Pain assessment and general approach to management, Management of Pain, The Veterinary Clinics of North America, Small Animal Practice, July 2000, p. 729-755):

Assessment:

Layla is a 6 yo SF Mastiff s/p R lateral suture 7/27/17. She presents w. RH weakness, PWB, reduced ROM/flexibility, abnormal sitting/standing posture, and abnormal gait/positional transitions. Due to these deficits, she would benefit from skilled physical therapy 1-2x/wk for 8-10 wks to return functional mobility. Please see below for PT Goals and treatment strategies.

Problems:

PWB of RH

Limited Bi stifle and hip ROM

Decreased overall mobility with difficulty with positional changes

Incision adhesions

Post-surgical inflammation

Abnormal gait

Goals:

Decrease pain & inflammation for dog's comfort to increase WBing status & tolerance to rehab

Educate Owner re: rehab program, post-surgical limitations, on leash restrictions

Increase RH ROM to WNL by 2 wks

Encourage FWBing by 3 wks.

Strengthen RH by 10 wks.

Increase leash walking tolerance and endurance to 5 minutes per week and increase by 3-5 mins as tolerated weekly to 25 minutes in 9 wks.

Treatment Plan:

- HEP: Initiated w. controlled leash walking, ROM, stretching, massage, cold/heat therapy if tolerated, and standing tolerance w. assistance. Will progress strengthening, stability, postural exercises, and controlled leash walking program.
- Program within clinic: 1x/wk for 5wks
- Instructions for technicians/assistants: NA
- Turning Schedule: NA
- Gait Schedule: Increase leash walking tolerance and endurance to 5 minutes per week and increase by 3-5 mins as tolerated weekly

Actual History of Treatment

August 09, 2017 (eval)

Eval completed; UWTM 16.5in water height, 1.2 mph, 5min, assisted; See flow sheet- exercises reviewed today are for the HEP.

August 16, 2017 (visit 1)

Subjective Doing well with HEP and walking without lameness.

Objective **UWTM:** 18in water height, 1.4mph, 10min, independently, 2 bumpers
LASER: Bi stifles, Rx area 100cm², Dosage 10J/cm², Total Dosage 1000J, Continuous, Rx Time 1min 36sec
See Flow Sheet

Assessment Continues to tighten up when completing ROM/stretching. Tolerated exercises well. Layla had more difficulty with L shake paw. Continues to R side sit. Tolerated UWTM well. Bumpers had to be added to prevent stepping off of belt. Improved RH motion during gait.

Plan Review exercises and progress if tolerated. Continue to increase ROM/flexibility.

August 23, 2017 (visit 2)

Subjective Doing well with HEP, but difficulty with tripod. The owners notice decreased WB and increased stiffness after laying down. If Layla has been active, then she looks normal. She is tolerating walking well without lameness. Walks have been 10min 3-4x/day.

Objective **UWTM:** 17in water height, 1.5-1.7mph, 16min, independently
See Flow Sheet

Assessment Tolerated UWTM well with decreased water levels and no bumpers were needed. She tolerated all exercises, but no progression was made from the tripods because she still has low tolerance for them. Increased height of high step from 1 step to 2 steps.

Plan Complete exercises reviewed today for HEP. Progress walking to 15min 3-4x/day. Progress UWTM to 20min nv, if tolerated.



Stifle ROM

August 30, 2017 (visit 3)

Subjective Owners caught her on the couch a few times, she snuck up the stairs once, got out of a barricaded area within 20min, and she attempted to chase a cat. HEP is going well. Walking is better. Layla is seeing the surgeon on 9/6/17, prior to coming to next session.

Objective **UWTM:** 18in water height, 1.9mph, 20min, independently
See Flow Sheet

Assessment Tol UWTM well. Gait looked WNL without deficits. Some difficulty with Layla relaxing and allowing ROM/flexibility. Two people were needed for diagonals. Tol Bosu/stability ball well. Wobble board was challenging.

Plan Complete exercises reviewed today. Start commando crawl and review diagonals nv. Progress walking to 20min 2x/day. Progress note to be sent to Dr. Zitz.

September 6, 2017 (visit 4)

Subjective Doing well. Received report from Dr. Zitz- Ready at this point to do L stifle. HEP going well, except difficulty with diagonals. Walking went well.

Objective **UWTM:** 18in water height, 1.9-2.0mph, 25min, independently
See Flow Sheet

Assessment Tol UWTM. Better tol with ROM. Full ext, but continues to have difficulty relaxing with flex. Tol all exercises, except had difficulty with getting onto wobble board.

Plan Cont UWTM 25min. Complete exercises reviewed today for HEP.

September 13, 2017 (visit 5)

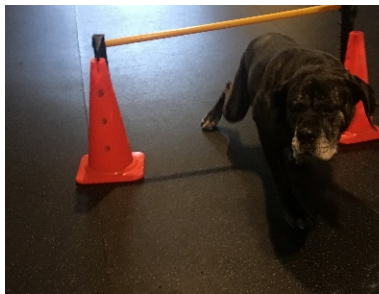
Subjective Scheduled for surgery on 9/21/17 for the L stifle. Will continue PT once the staples are removed. Walks were completed 2x/day for 20-25min.

Objective **UWTM:** 18in water height, 2.0mph, 25min, independently
See Flow Sheet

ROM: Flex=40deg, Ext=150deg

Assessment Tol UWTM. Layla resisted flexion. Overall improvement noted with WB, strength, ROM, and proprioception. Improvement still needed with stifle flex.

Plan Surgery of the LH Thurs 9/21/17. Owner instructed to continue ROM of RH while LH recovering.



Commando Crawl

Evaluation 2

October 4, 2017

Observation:

Incision intact and raised with no sx of infection

Palpation

Tightness of L HS, no tenderness or warmth of L stifle

Posture

- **Standing:** Low T-spine and high L-spine increased kyphosis, PWB LH, slight weight shift fwd
- **Sitting:** LH underneath w. LH in slight ABD

Functional Mobility

- Stand > Sit: Decreased eccentric control, decreased WB LH
- Sit > Stand: Decreased push off LH

Gait Assessment:

- Walk: 2/4, LH hip ADD w. swing through, PWB LH, maintains slight stifle flex throughout gait
- Trot: NA

PROM (deg)		R	L*
Limbs: Hip	Flex/Ext	WNL	WNL
	Stifle Flex	65	52
	Ext	140	140

- Difficulty with ROM secondary to dog maintaining flex position and resisting ROM

Flexibility

L HS tightness

Circumference (cm)		R	L*
Hind End	Hip	52	51
	Stifle	23	23

Neurological Testing

NA

Pain

3/10 (Matthews, K.A., Pain assessment and general approach to management, Management of Pain, The Veterinary Clinics of North America, Small Animal Practice, July 2000, p. 729-755):

Assessment:

Layla is a 6 yo SF Mastiff s/p R lateral suture 7/27/17 and L lateral suture 9/21/17. She presents w. LH weakness, PWBing, reduced ROM/flexibility, abnormal sitting/standing posture, and altered gait/positional transitions. Due to these deficits, she would benefit from skilled physical therapy 1-2x/wk for 8-10 wks to return functional mobility. Please see below for PT Goals and treatment strategies.

Prognosis: Excellent**Problems:**

PWB of LH

Limited Bi stifle ROM & hip flexibility

Decreased overall mobility with difficulty with positional changes

Incision adhesions

Goals:

Educate Owner re: rehab program, post-surgical limitations, and on leash restrictions

Increase ROM & flexibility of LH to WNL by 2 wks

Encourage FWBing by 3 wks.

Strengthen LH by 10 wks.

Increase leash walking tolerance and endurance to 5 minutes per week and increase by 3-5 mins as tolerated weekly to 30 minutes in 9 wks.

Treatment Plan:

Massage

Gait training to encourage weight shifting and weight bearing onto LH

Mobility training at proper sitting posture and rising from sit and recumbent positions

LASER use to improve pain, inflammation, and healing

Therapeutic exercises for strengthening LH

Underwater treadmill progression to increase strength, WBing, flexibility, and endurance.

Develop Home Exercise Program of owners carrying out ROM, Massage, strengthening, and stretching ex

Follow Up/ Interdisciplinary Recommendations: Recheck with DVM as required for pain management as necessary.

October 04, 2017 (eval)

Eval completed; UWTM 18in water height, 1.4 mph, 5min, independent; Complete exercises reviewed today for HEP.



October 06 2017 (phone)

Owner LM that he hears clicking in Layla's hip and wants to discuss with PT if he should still do exercises.

October 07, 2017 (phone)

PT called owner and discussed the clicking. At this time, it is not a concern. Owner was educated on clicking and is to continue the exercises.

October 11, 2017 (visit 6)

Subjective Owner noticed more clicking. Layla seems to be comfortable and wants to keep walking. HEP was completed, but they stopped doing sit/stands. Walking 5min 3-4x/day.

Objective **UWTM:** 18in water height, 1.4-1.7mph, 12min, independently
LASER: L stifle, Rx area 100cm², Dosage 10J/cm², Total Dosage 1000J, Continuous, Rx Time 1min 36sec
See Flow Sheet

Assessment Tol UWTM and ex well. Bi stifle flex continues to be limited. R stifle crepitus felt with ROM. Sit/stands w. decreased HL use.

Plan Owner to complete exercises reviewed today for HEP and walk 10min 3-4x/day. Next visit: continue stifle ROM, increase UWTM to 15min, review sit/stands, and progress ex as tolerated.

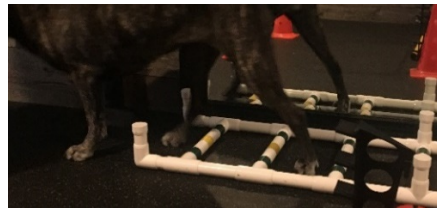
October 18, 2017 (visit 7)

Subjective Walks are going well. She has loads of energy and owner trying really hard to keep her calm and quiet. Seems to be feeling great. No problem putting weight on RH now. Walking 10min 3-4x/day. Are massaging and stretching both HL. Owners noticed decreased clicking if Layla walks slower.

Objective **UWTM:** 18in water height, 1.7-1.9mph, 17min, independently
See Flow Sheet

Assessment Tol UWTM and ex. Continues to prefer side sitting. Showed owners how to use a cushion to help get her to sit more square.

Plan Owner to complete exercises reviewed today for HEP, continue working on sit/stands, and walk 15min 3-4x/day. Next visit: continue stifle ROM, increase UWTM to 20min, and progress ex as tolerated.



Ladder

October 25, 2017 (visit 8)

Subjective Feels good. Still using sling for stairs. Walking 15min 3x/day. No more clicking noted.

Objective **UWTM:** 18in water height, 1.7-2.0mph, 20min, independently
See Flow Sheet

Assessment Tol UWTM and ex. Tripods and diagonals went well and Layla was able to hold for the full 10sec.

Plan Owners to complete exercises reviewed today for HEP and walk 20min 2x/day. Continue laser and ROM. Progress UWTM to 25min and progress ex as tolerated nv.

November 01, 2017 (visit 9)

Subjective No sling or clicking. Doing well overall. Completing HEP daily.

Objective **UWTM:** 16in water height, 1.8-2.2mph, 25min, independently
See Flow Sheet

Assessment Tol all ex well. Difficulty getting on balance board, but was able to complete the exercise.

Plan Owner to continue exercises reviewed today for HEP, but is to do an obstacle course with the exercises. Continue laser, ROM, and UWTM x25min. Continue to work on stability ex nv.

November 15, 2017 (visit 10)

Subjective She likes commando crawl. Increased ladder height. Improved square sitting. No clicking.

Objective **UWTM:** 16in water height, 2.1mph, 25min, independently
See Flow Sheet

Assessment Tolerated all ex. Difficulty to get Layla's HL on the disc, but she was able to do after 6 tries. ROM was WNL. Tol UWTM, but was fatiguing around 20min.

Plan Cont w. stability ex and UWTM x25min.



Bosu and Disc

January 03, 2018 (visit 11)

- Subjective Doing well, but not too many walks because of the bad weather. Doing most of the exercises. Owners feel Layla is getting back to normal. She is not taking any meds currently.
- Objective **UWTM:** 16in water height, 1.8mph, 25min, independently
See Flow Sheet
- Assessment Kept at a slow and steady pace in the UWTM because it's been a while since the last visit. She tolerated it well. Tol ex well.
- Plan Prepare for DC nv.

February 12, 2018 (visit 12)

- Subjective Has been walking 2x/day for 20-30min, weather permitting. Layla looks normal on her walks. Exercises are going well. Layla has occasional stiffness.
- Objective **UWTM:** 16in water height, 2.0mph, 25min, independently
See Flow Sheet
ROM: flex=57deg
- Assessment Tol UWTM well. Improved ROM, strength, proprioception, and functional mobility. Gait WNL.
- Plan DC from PT. Owners are encouraged to continue the exercises about 3x/wk, except sitting and stifle flex are to be completed daily.

FLOW SHEET

Dog's Name: Layla Savard

Dx: s/p Bi Lateral Sutures R on 07/27/18 & L on 09/21/17

DATE	10/25/17	11/01/17	11/15/17	01/03/18	02/12/18				
MANUAL									
Massage									
ROM			x	x	x				
Stretches: Hind Limbs									
HS					x				
Hip flexor					x				
Quad									
Adductor									
Stretches: Fore Limbs									
Shldr Flexors									
Shldr Extensors									
Elbow Flexors									
Elbow Extensors									
MODALITIES									
LASER	x	x	x	x	x				
E-Stim/NMES									
Cold/Heat									
THERAPEUTIC EXERCISE									
UWTM	x	x	x	x	x				
Land TM									
Standing treat									
Shake Fore Paws	5x10sec								
Sit to stand	x5					x			
High stand				x					
Cavaletties		3x4	x	x					
Ladder		x3	x	x					
Tripods	5x10sec					2x10sec			
Diagonals	5x10sec					2x10sec			
Backing up	3x5ft		x	2x5ft					
Commando crawl		x3	x	x2					
Tummy tickles									
Spinal side bending									
STABILITY									
Balance board		2x15sec	x		x				
Bosu	2x15sec	2x15sec	x						
Disc/Bone									
Balance pad									
Peanut Ball		2x15sec	x	x					
OBSTACLE COURSE		x	x	x					
WALKING									
Stairs									
Circle, serpentine, Fig 8									
Hills									
POSTURE									
Standing									
Sitting									
Weight shifting									
OTHER									
INITIALS	JL	JL	JL	JL	JL				